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# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of: McLeod

Serial No.: 10/699,956

Confirmation No.: 5094

Filed: November 3, 2003

For: Increasing Syndiotactic Propylene

Polymer Cast Film Line Speed

Atty. Dkt. No.: COS-929

Group Art Unit: 1732

Cust. No.: 25264

Examiner: Vargot

Mail Stop Appeal Brief-Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Honorable Commissioner:

#### CERTIFICATE OF MAILING 37 CFR 1.10

I hereby certify that this correspondence is being deposited on the date below with the United States Postal Service as Express Mail, Mailing Label No. <u>EQ 190571704 US</u>, in an envelope addressed to: Mail Stop Appeal Brief-Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 223/3-1450.

7/12/2007

Signature

#### TRANSMITTAL LETTER AND FEE AUTHORIZATION

In connection with the above identified application, Applicants respectfully submit the following documents:

### 1. Appeal Brief.

The Commissioner is authorized to charge the fee of \$500.00, along with any additional fees that may be required for this submission, or credit any overpayments, to Deposit Account No. 03-3345.

Respectfully submitted

Lenora Evans

Fina Technology, Inc. P.O. Box 674412

Houston, Texas 77267

Telephone: 713-483-5365 Facsimile: 713-483-5384

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#### APPEAL BRIEF

Appellants submit this Appeal Brief to the Board of Patent Appeals and Interferences on appeal from the decision of the Examiner of Group Art Unit 1732 dated April 3, 2007, finally rejecting claims 43-44, 51-70 and 72.

#### **Real Party in Interest**

The present application has been assigned to Fina Technology Inc., P.O. Box 674412, Houston, Texas 77267.

#### **Related Appeals and Interferences**

Appellants assert that no other appeals, interferences or judicial proceedings are known to the Appellants, the Appellants' legal representative or Assignee that will

07/13/2007 SLUANG1 00000019 033345 10699956 01 FC:1402 500.00 DA directly affect, be directly affected by or have a bearing on the Board's decision in the pending appeal.

#### **Status of Claims**

Claims 43-44, 51-70 and 72 are pending in the application and stand rejected under 35 U.S.C. §103(a). The rejection of the pending claims is appealed. The pending claims are shown in the attached Appendix A.

#### Status of Amendments

Independent claim 43 was amended to incorporate the subject matter of dependent claim 71 therein in Response to the Final Office Action. Such amendment has been entered.

#### **Summary of Claimed Subject Matter**

Independent claim 43 recites casting a film consisting essentially of a homopolymer of syndiotactic propylene (sPP) at a film line speed of from about 35 to about 200 feet per minute, wherein the casting occurs on a cast roll and the cast roll is maintained at a temperature of from about 90 to about 110 degrees Fahrenheit.

. See, specification, at least paragraph

#### Grounds of Rejection to be Reviewed on Appeal

1. The rejection of claims 43-44, 51-70 and 72 under 35 U.S.C. §103(a) as being unpatentable over *DeLisio*.

#### Arguments

I. THE EXAMINER ERRED IN REJECTING CLAIMS 43-44, 51-70 AND 72 UNDER 35 U.S.C. §103(a) AS BEING UNPATENTABLE OVER DELISIO.

Claims 43-44, 51-70 and 72 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,391,467 (*DeLisio*). *DeLisio* teaches a cast film including a metallocene-catalyzed substantially syndiotactic propylene polymer (sPP). *See*, Column 1, lines 54-56. The film can further be fabricated with one or more outer

layers. See, column 2, lines 19-20. While DeLisio recites that the film "can" be fabricated with one or more outer layers, it is well known by those skilled in the art that at low concentrations, sPP may improve properties of the cast film. However, higher concentrations of sPP have typically required additional aids, such as blending or additional film layers to reduce tackiness. This is further demonstrated by the fact that the remainder of DeLisio focuses on the additional layers of the cast film and the examples only show multi-layer cast films. See, column 2-column 5.

It is impermissible within the framework of Section 103 to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art." See, In re Wesslau, 353 F.2d 238, 241, 147 U.S.P.Q. 391, 393 (C.C.P.A. 1965). The Examiner states that "[c]learly, DeLisio et al envisions casting sPP films only". See, Advisory Action. Appellants disagree. The Examiner further states that "[o]ne of ordinary skill in the art may realize that such would require a The Examiner's statement processing aid." See, Advisory Action (emphasis added). that processing a film of sPP would require a processing aid directly supports Appellants position that the features recited in the pending claims (and supported by the specification) are nonobvious. In particular, embodiments of the invention allow casting films consisting essentially of sPP without the need of processing aids to reduce stickiness. However, while the processing temperatures recited in the pending claims reduce polymer tackiness and buildup on equipment, they may increase the occurrence of melt fracture. Therefore, a processing aid may be added to the sPP to reduce the occurrence of melt fracture. See, specification, at least paragraph 12.

In summary, the pending claims teach line speeds and casting temperatures that are specific to films consisting essentially of sPP (to minimize tackiness and thereby sticking to the cast roll). This issue is not contemplated or addressed by *DeLisio* as they are using outer layers to prevent sticking. The Office Action states that "certainly, it would have been within the skill level of the art to perform the casting in *DeLisio* at a slightly slower speed than that taught therein given that one would be willing to accept a longer processing time."

Where the prior art has not recognized the result-effective capability of a particular invention parameter, no expectation would exist that optimizing the parameter would successfully yield the desired improvement. *See*, *In re Antonie*, 559 F.2d at 619, 195 U.S.P.Q. at 8 (stating two exceptions to a result effective variable's prima facie obviousness; 1. unexpectedly good results and 2. the art did not recognize that the parameter optimized was a result-effective variable).

Appellants respectfully submit that no expectation would exist that by optimizing the parameters of lines speed and casting temperature (and using a specific defined range of each, in combination) a cast film would successfully be formed of only syndiotactic polypropylene. Therefore, it cannot be presumed that it would be within the skill in the art to extrapolate casting temperatures and line speeds from the teaching of *DeLisio*. Accordingly, of the rejection is respectfully requested.

#### Conclusion

In conclusion, *DeLisio* nowhere teaches, shows or suggests casting a film consisting essentially of syndiotactic polypropylene, as recited in the pending claims. Thus, Appellants respectfully request reversal of the rejections of claims 43-44, 51-70 and 72.

Respectfully submitted,

Tenley R. Krueger Registration No. 51,253

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Sugar Land, Texas 77496 Telephone: 281-778-8934

Fascimile: 281-778-8937 Attorney for Appellant(s)

#### Appendix A

#### Pending Claims

#### 43. A method comprising:

casting a film consisting essentially of a homopolymer of syndiotactic propylene (sPP) at a film line speed of from about 35 to about 200 feet per minute, wherein the casting occurs on a cast roll and the cast roll is maintained at a temperature of from about 90 to about 110 degrees Fahrenheit.

- 44. The method of Claim 43 wherein the film line speed is from about 90 to about 120 feet per minute.
- 51. The method of Claim 43, wherein the sPP comprises a peak melt temperature of from about 120 to about 140 degrees Celsius.
- 52. The method of Claim 43 further comprising adding a processing aid to the sPP prior to casting.
- 53. The method of Claim 52, wherein the concentration of the processing aid in the sPP is less than about 3,000 parts per million by weight of sPP.
- 54. The method of Claim 52, wherein the concentration of the processing aid in the sPP is from about 100 to about 1,500 parts per million by weight of sPP.
- 55. The method of Claim 52, wherein the concentration of the processing aid in the sPP is from about 900 to about 1100 parts per million by weight of sPP.
- 56. The method of Claim 52, wherein the processing aid comprises a fluoropolymer.
- 57. The method of Claim 52, wherein the processing aid comprises a fluoroelastomer.

- 58. The method of Claim 52, wherein the film comprises a coefficient of friction of less than about 1.0.
- 59. The method of Claim 52, wherein the film comprises a coefficient of friction of less than about 0.7.
- 60. The method of Claim 52, wherein the film comprises a coefficient of friction of less than about 0.4.
- 61. The method of Claim 52, wherein the film comprises a maximum tensile strength of at least about 4,200 pounds per square inch.
- 62. The method of Claim 52, wherein the film comprises a maximum tensile strength of at least about 5,000 pounds per square inch.
- 63. The method of Claim 52, wherein the film comprises a maximum tensile strength of at least about 6,000 pounds per square inch.
- 64. The method of Claim 52, wherein a haze of the film is greater than about 10 percent.
- 65. The method of Claim 52, wherein a 20 degree gloss of the film is less than about 20 percent.
- 66. The method of Claim 52, wherein a 45 degree gloss of the film is less than about 90 percent.
- 67. The method of Claim 52, wherein a percent elongation of the film is less than about 600 percent.
- 68. The method of Claim 43, wherein the film is from about 0.5 to about 6 mils thick.

- 69. The method of Claim 43, wherein the film is from about 1 to about 5 mils thick.
- 70. The method of Claim 43, wherein the film is from about 2 to about 4 mils thick.
- 72. The method of claim 43, wherein the homopolymer of syndiotactic propylene exhibits a melting temperature of from about 125°C to less than 135°C.

## Appendix B

## Evidence

- 1. In re Wesslau, 353 F.2d 238, 147 U.S.P.Q. 391 (C.C.P.A. 1965).
  - 2. In re Antonie, 559 F.2d at 619, 195 U.S.P.Q. at 8.

# Appendix C Related Proceedings

Not Applicable